



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Ryusuke Hasegawa et al. Group Art Unit: 2832  
Serial No.: 10/071,368 Examiner: Tuyen T. Nguyen  
Filed: February 8, 2002  
For: **FILTER CIRCUIT HAVING AN FE-BASED CORE**  
Docket No.: H0002699 (4710) / 0017-17  
Matter No.: 0170-2699

Bedminster, NJ 07921  
May 17, 2004

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**AMENDMENT UNDER 37 CFR 1.116**

In response to the Office Action dated February 12, 2004, the following remarks are filed. Claims 1, 4, 5, 7, 8, and 11 are under consideration.

**REMARKS**

Applicants' invention, as recited by present claims 1, 4, 5, 7, 8, and 11, provides a bandpass filter including an inductor with a magnetic core consisting essentially of an Fe-base amorphous metal alloy ribbon. The core has a constant permeability over a wide frequency range, e.g. a range of about 1 to 1000 kHz. Preferably the permeability is constant over a field strength range of approximately -15 to +15 Oe.

The use of a magnetic core consisting essentially of an Fe-base amorphous metal alloy ribbon, and which has a constant permeability over a range of 1 to 1000 kHz, provides a number of advantages in constructing bandpass filters. As set forth in detail in applicants' specification, e.g. at page 5, lines 10-11, the resonant frequency of a filter circuit comprising an inductance L and a